



Next Generation  
MICRO Nuclear Energy

## Fully Modular

Factory fabrication and rapid assembly

## Small Footprint

1/3 of a football pitch with low vertical profile

## Universal Siting

Minimal water requirements

## Proven Technology

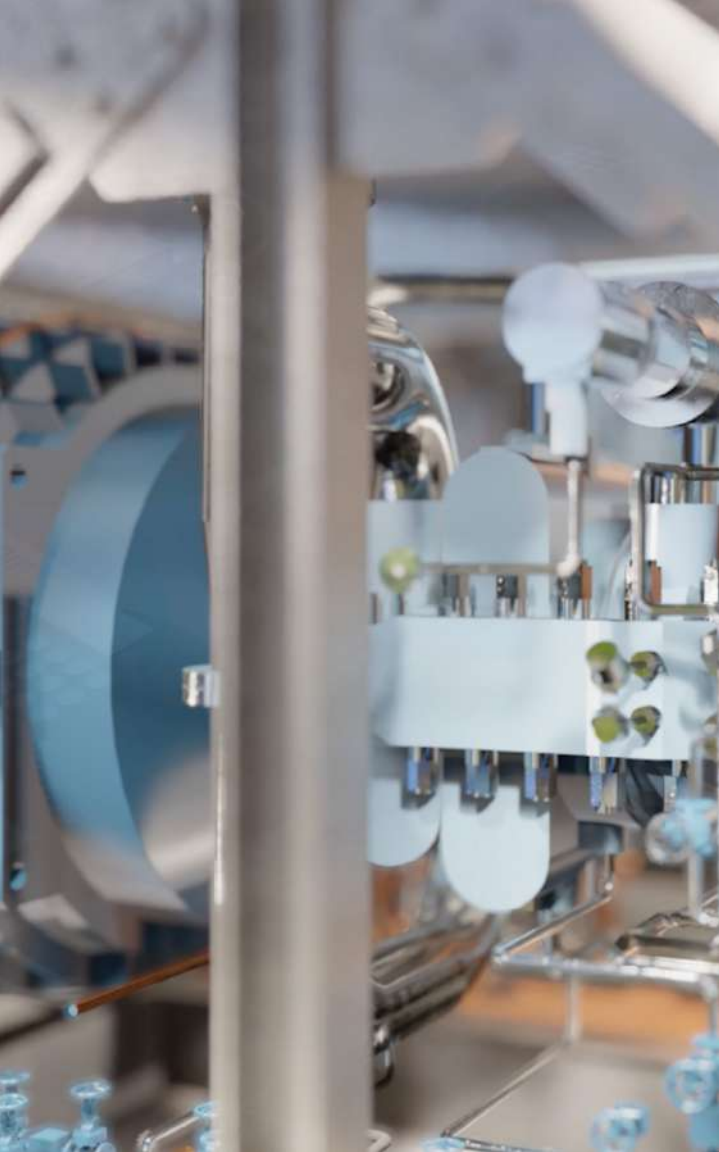
300+ pressurized water reactors (PWR)  
operating worldwide

See how Last Energy is changing  
the way nuclear is delivered.



**We designed the PWR-20 for rapid deployment,**  
leveraging proven technology and existing supply chains to meet our customers' energy needs.





To ensure rapid deployment and scalability, we innovate on the delivery model, not the reactor technology.



## Delivers in 24 Months



Factory fabrication

20 mo.

On-site  
assembly



4 mo.

Last Energy's full-service model streamlines nuclear energy delivery. We design, build, own, and operate our PWR-20—a 20 MWe micro modular nuclear power plant—providing energy to industrial customers through power purchase agreements (PPAs).

By utilizing PPAs in the nuclear industry, our customers can prioritize their business without the added challenges of energy insecurity, price volatility, or grid instability.

Nuclear is the only scalable, carbon-free, and commercially deployable option for reliable baseload heat and electricity. This is a breakthrough for industrial customers who need to maintain 24/7 operations.

Last Energy simplifies the delivery of nuclear energy to meet the unique requirements of industrial customers including location, baseload energy, and heat demands.



# PROVEN

The PWR-20 utilizes pressurized water reactor (PWR) technology found in over 300 commercial reactors around the world. By standardizing proven PWR technology, Last Energy benefits from a robust operational history, an existing supply chain, and readily available nuclear fuel.

## 300+ PWRs operational worldwide

Within the PWR-20, we employ industry-standard sub-5% enriched fuel. By utilizing standard-length fuel rods, we leverage the same fuel configuration used in large-scale power plants, enabling seamless integration with an existing supply chain.

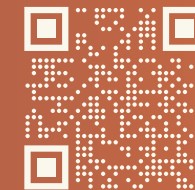
# MODULAR

At Last Energy, modularity is not just a label but a fundamental design philosophy. We embrace a comprehensive approach to modularity, ensuring that every piece of equipment in the PWR-20 is factory-fabricated, installed in standardized modules, and shipped using standard-size trucks.

The PWR-20 is built from standardized modules, each factory-fabricated, skid-mounted, and sized for road transport for rapid installation on site.

Modular manufacturing offers rapid on-site assembly and minimal on-site or specialty labor. Standard connectors—widely used for structural, electrical, and pipe connections—quickly link the modules together.

See the PWR-20's  
fully modular design  
come together.





# SCALABLE

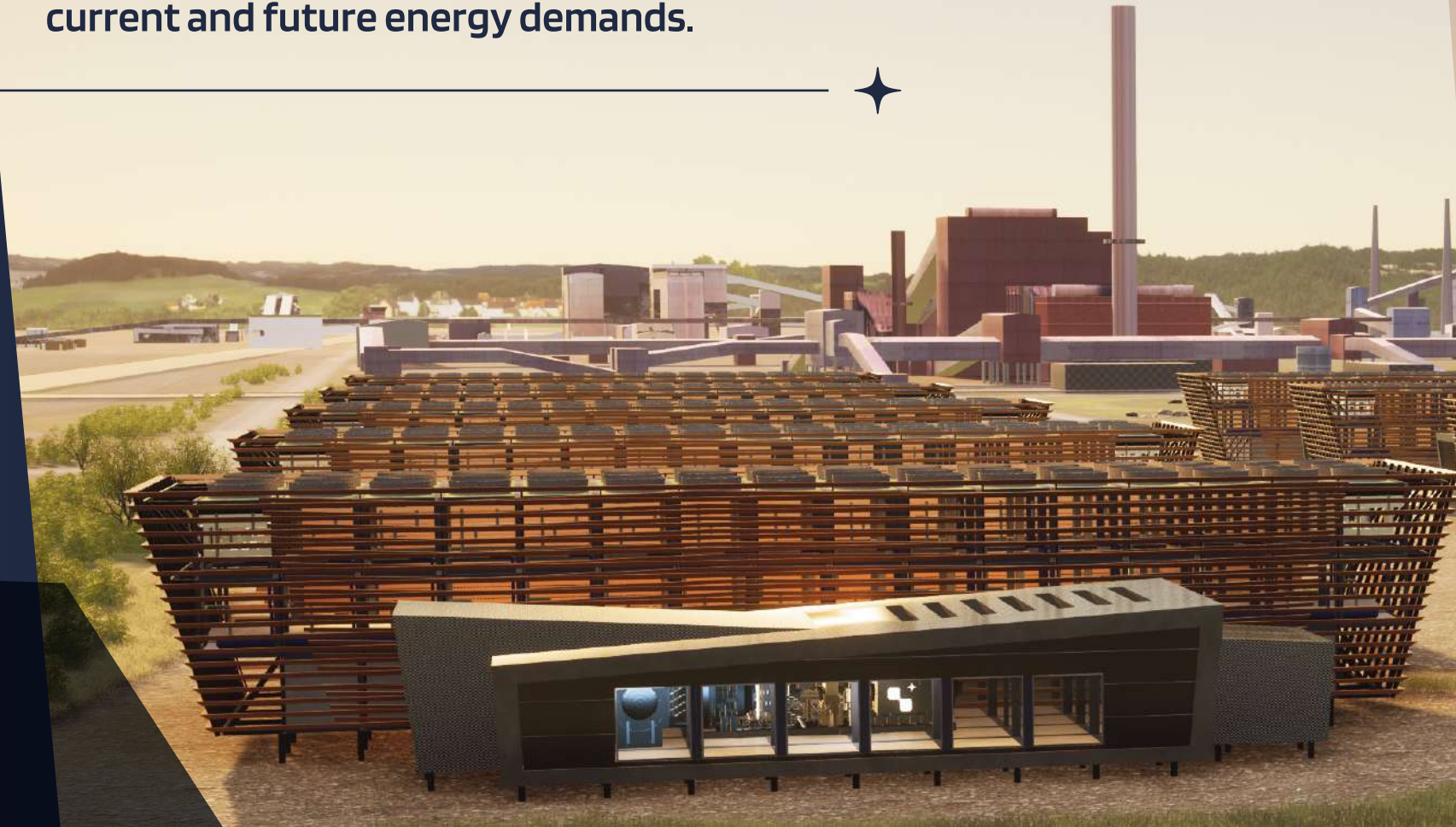
The PWR-20 offers a scalable approach to industrial energy demands. Our plant is designed to deliver 20 MWe to easily fulfill energy demands and simplify capacity expansion. Modular manufacturing and rapid installation of additional plants allow us to scale and grow alongside our customers.

Scalability goes beyond power output; it also extends to the flexibility of our design. The PWR-20 does not need to be located near a water source, as its minimal water requirements can be delivered to site via trucked-in containers. The plant can be installed either on a customer's site or at a suitable location within 10 kilometers of grid connection.

Regardless of placement, the PWR-20 is designed to have a low-profile appearance, falling below the tree line. With its discreet aesthetics and minimal land and water requirements, the PWR-20 offers near-universal siting options to make clean baseload power more accessible to industrial partners of every size and sector.

**Modular manufacturing and rapid installation of additional plants allow us to scale and grow alongside our customers.**

**Delivered in 20 MWe units, the PWR-20 can be deployed incrementally to meet current and future energy demands.**



# SUPPLY CHAIN

By leveraging established supply chains, we gain access to a robust global network of suppliers, capitalizing on market competition. Utilizing low-enriched uranium (LEU), the most widely available nuclear fuel, ensures a readily accessible supply chain, simplifying the fulfillment process.

**Existing supply chains enable rapid deployment**

- ✓ Nuclear reactor components
- ✓ Balance of plant components
- ✓ Construction equipment and labor
- ✓ Fuel
- ✓ Maintenance equipment





# INDUSTRIAL

**From scalable power output to near-universal siting, we make clean baseload power easily accessible to industrial customers.**

Last Energy's contracting options provide long-term, time-matched commitments, price stability, and carbon-free energy to customers through PPAs. PPAs clearly outline the price of energy, allowing customers to make long-term plans while reducing their exposure to price volatility and increasing operational certainty.

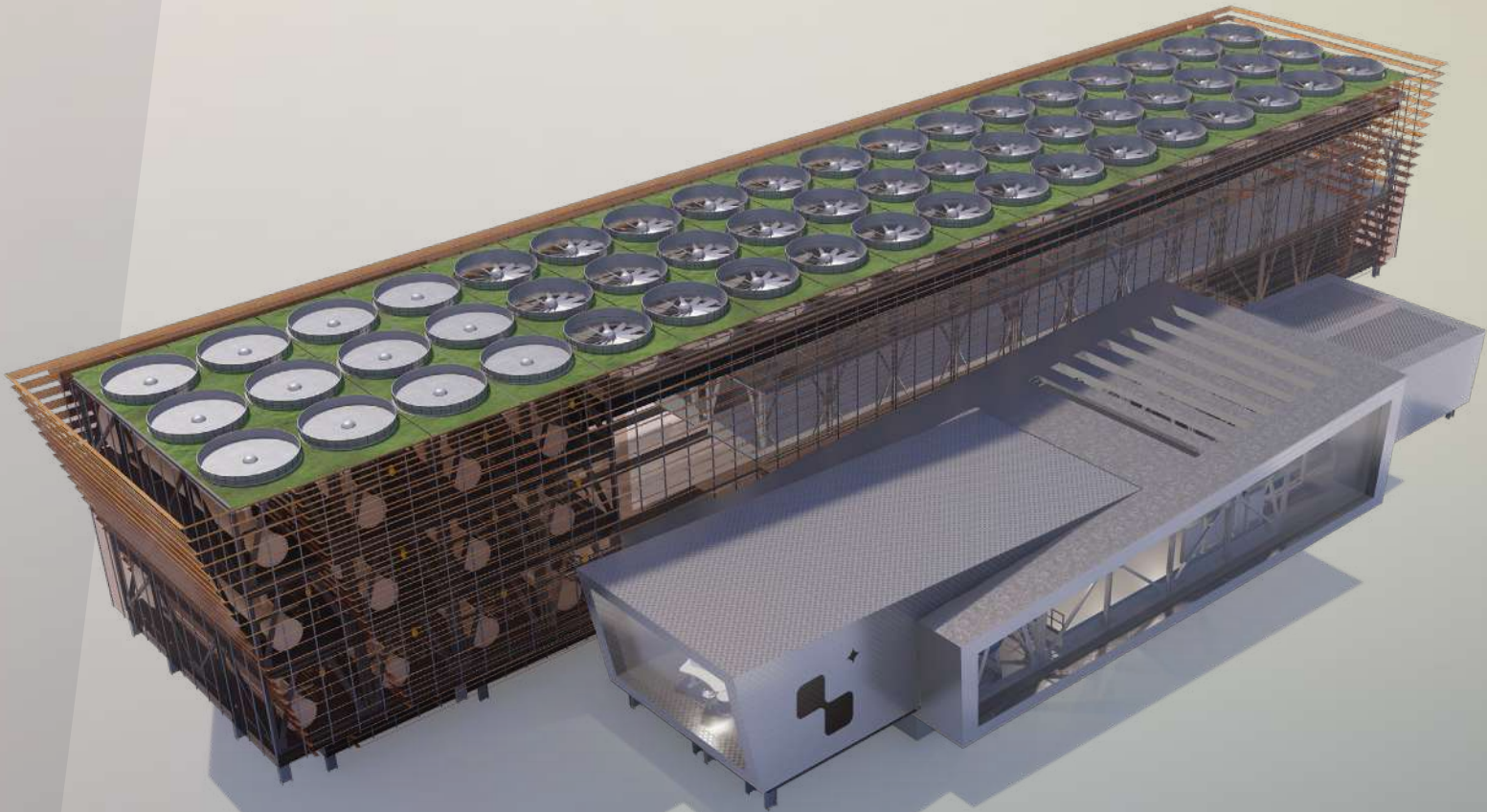
Uniquely capable of providing stable, scalable, on-site electricity and heat (up to 300°C), nuclear is the only carbon-free baseload energy source that meets industrial customers' 24/7 energy demands.

✦  
**The PWR-20 supplies  
both electricity and  
heat for industrial  
applications up to 300°C**



# DESIGN DETAILS

Reactor Type	Pressurized water reactor
Coolant/Moderator	Light water/light water
Electrical Capacity	20 MWe
Thermal Capacity	~80 MWt
Fuel	Standard UO <sub>2</sub> pellets at <4.95% enrichment
Primary Circulation	Forced circulation
Cooling	Closed cycle air cooling for tertiary loop, <1 gpm water use
Siting	Flexible siting within 10 km of grid access, small footprint allows for on-site generation
Design	Fully modular design consists of two primary structures: <b>Nuclear Island</b> - a subterranean structure that houses the plant's reactor <b>Balance of Plant</b> - an above ground thermal power plant
Refueling	>95% capacity factor, 3-month planned refueling outage occurs every 72 months



# FULLY MODULAR DESIGN

Our modular power plant design leverages best-in-class construction techniques from hundreds of thermal power plants around the world, enabling rapid project delivery, increased quality control, and strict cost controls.



## Key Features:

Factory-fabricated and tested modules

Industry-standard components from existing supply chains

Road-transportable modules on standard size truck

4 months of on-site construction work



# A FULL LIFECYCLE APPROACH

Last Energy brings the energy-as-a-service model to the nuclear sector—streamlining the delivery of reliable baseload electricity and heat—by taking end-to-end responsibility for all deployment activities from product design to operations and maintenance.

## Product

The PWR-20 was engineered for ease of constructability and rapid deployment, utilizing proven reactor technology.

## Project Development

Last Energy takes responsibility for all development and planning activities, ensuring on-time and on-budget deployment.

## Project Delivery

To expedite our deployment timeline, Last Energy manages all stages of project delivery, from assembly to commissioning.

## Nuclear Licensing

By utilizing proven reactor technology, we leverage operational predictability and design simplicity to achieve an efficient nuclear licensing process.

## Commercial Structuring

Last Energy provides customers and the grid with reliable, carbon-free electricity and heat through power purchase agreements.

## Operations and Maintenance

As the dedicated asset manager, Last Energy oversees all operations and maintenance activities of our plants.

Customers sign a PPA and Last Energy handles the rest.







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